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ABSTRACT

Arguing that by identifying rules, researchers can understand and explain behavioral and communicative processes in specific contexts, this paper outlines a formal method for conducting a rules analysis of a conflict case. The first section of the paper defines and summarizes the basic concepts relating to conflict, organizational groups, and communication rules. The second section discusses the feasibility of a rules study and its impact, along with the case study as one approach to research, while the third section presents a generative system for applying rules. The fourth section of the paper outlines a procedure for such a system and discusses its advantages. The fifth section describes a specific case study that examined conflict interactions within two interconnected groups in the same organization. The final section considers the advantages of the method of analysis in terms of rules research, case studies in general, and conflict research in particular. An appendix contains a list of the conflict rules observed in the study. (FL)

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# ORGANIZATIONAL GROUPS IN CONFLICT:

## A Case Study of Conflict Interaction From a Rules Perspective

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## Overview.

> The important thing about criminals - and other desperadoes such as children, comics, saboteurs, and the certified insane - is not what they do or why they do it. Not is it necessary to look into the darkness of their souls in order to learn about the darkness of our own....The importance of these strays is not in the clues they provide as to what, in our heart of hearts we do also, but rather in the contrastive light their situation throws on what, in doing what we do, we are doing. A radical method must take ordinary people doing ordinary things as the central issue (Goffman, 1971, p.260).

Goffman, in his focus on subject of study, suggests one very critical element of social research that is often lost or ignored in practice. That is, the aim of research is understanding, via some method or framework, some phenomenon within a recognized social order. The focus of study determines what element is understandable or explainable, while the method determines the type and degree of explanation or understanding.

In this study, consciously acknowledging the underlying purpose of research, we attempt to look at ordinary people doing ordinary things. In doing so, we hope to be able understand these people and events in terms of broader social structures. Within the entire field of communication, organizations are pinpointed as one of the most common yet interesting forums for action. Within organizations, the small group provides the level of organized interaction that allows for microscopic analysis of everyday events. The field is further narrowed by focusing on only one type of group interaction, conflict interaction, chosen because it is a distinct and identifiable form of interaction, as well as one pervasive and common to most small groups. It is a critical form of interaction, as it impacts on such organizational concerns as decision-making and decision accuracy (Thomas,

1976; Pood, 1980; Hall, 1971; Weick, 1973; Janis & Mann, 1977), and group climate (Deutsch, 1973; Folger & Poole, 1984; Gouran, 1982; Louis, 1977; Jones & Melcher, 1982). However, organizational groups do not exist in a vacuum: they are dependent on both the members that form the groups, and on the larger organizations that frame them. It is this unique sort of "interconnectivity" that makes small groups an ideal level of analysis.

This commitment to using data that emerges from everyday interaction is accompanied, necessarily, by a tendency to ask and study questions relating to setting small enough to "get at" the data as it is enacted through interaction, such as through a case study. This framing focuses on the conscious choices actors make in interaction, but not necessarily on the history of the action. The microscopic level of analysis is necessary for understanding action, but operates at extremes from its purpose, the explanation or understanding of macro- societal questions. This dilemma is personified by the case study.

A potential problem with case studies is that they are difficult to generalize from (Campbell & Stanley, 1963). In any research design, the ability to generalize can be accomplished in two ways, by having a large sample, or by linking the constructs under study to general social phenomena. A case study is in the best position to incorporate the second suggestion. Case studies can reveal important insights about general social phenomena, because they are context-rich. By studying general constructs in context, we can discover how they figure in social life by the conditions and constraints under which they operate.

One approach to the study of communication in context uses communication rules as its key explanatory concept. This position

suggests that concrete rules for the production of behavior exist and that these rules serve as principles that regulate the communication and behavior of interactants. By identifying the rules, researchers can understand and explain behavioral and communicative processes in specific contexts. This study is an attempt to look at conflict interaction by identifying the rules that frame it. However, identifying conflict rules is only the first step, since a list of context-bound rules is not generalizable. Once identified for a given context, it is important to try to discover how rules are organized, to understand the processes or forces that generate the rules, and to clarify how actors apply these relatively abstract rules in specific contexts.

This paper will outline a formal method for conducting a rules analysis of a conflict case. We hope to show how abstract, formal modelling of rules can shed light on conflict in a specific context. We also hope to show how a formal approach can facilitate discovery of aspects of more general social structures from comparative case studies. This paper is divided into five sections. First, the basic concepts relating to conflict, organizational groups, and communication rules are defined and summarized. Next, the feasibility of a rules study and its impact are discussed along with the case study as one approach to research. Following this, a generative system for applying rules is presented. Fourth, procedures are outlined and discussed, along with the advantages to this approach. Fifth, we present an example of a specific case analysis. Finally, we discuss the advantages and disadvantages of this approach.

Four broad research questions guide this study: 1) What are the communication rules for conflict interaction in organizational groups?; 2) How does context figure in the application of these

rules?; 3) How are rules generated and maintained; and 4) How do actors apply rules in interaction? These questions focus on group conflict-management rules, attempting to identify, describe, generalize and explain conflict interaction using formal rule modelling as a methodological tool.

## The Nature of Conflict

Definition. Conflict may be defined as a particular kind of social interaction process between parties who have mutually exclusive or incompatible goals (Pink, 1968, Folger & Poole, 1984). Several points need to be made in connection with this definition: 1) conflict is action, i.e., a socially-constructed and defined activity; and 2) conflict is interaction-based.

Conflict as Action. Conflict is a type of action. That is, it exists as an activity, not an entity. It is constructed and enacted by participants, and its outcome is determined by participants. Much of conflict literature carries an implicit assumption that conflict parties are respondents to stimuli, rather than active participants in communication activity (Cosier & Ruble, 1981; Jones & Melcher, 1982; Sillars, 1980, Thomas & Pondy, 1977; Brehmer & Hammond, 1973). In constrast, we argue that conflict interaction is shaped by active choices made by participants, each interacting with his/her own background information, biases, and interests in mind. Participants in a conflict situation react differently, depending on their interpretations of the situation. Conflict is the product of action, not reaction. Since conflict must have at least two parties, in action, interaction becomes a product of the action.

Conflict as Interaction. Conflict is best studied as interaction. In literature, whether study has focused on outcome measures

such as job satisfaction, problem-solving, and manager style, or on individual behaviors, interaction has not been the focus of study. Yet it is in interaction that conflict occurs, and studying antecedent conditions, or individuals attitudes, or any other related variable, can only inform us on part of the story. To understand conflict, one must study the conflict, the interaction itself. In doing so, we must acknowledge that actors exhibit some regular types of behaviors in conflict. In this view, a style is a general expectation about how the conflict should be approached. This approach acknowledges that people exhibit consistent strategies or styles without denying their capacity to change (Putnam & Wilson, 1982). Choosing a style, or orientation, is contextually-driven, depending on the interaction that takes place. Thus, interactions can be described as situationally-defined, where consistent orientations to behavior are determined by the context of the interaction.

The context of action, or the situation of the conflict, has been studied from many perspectives (Coser, 1956, Thomas, 1976) Deutsch (1973), with his analysis of the role of climate in conflict, presents a framework of conflict interaction where background conditions frame action. Deutsch argues that "the processes of conflict resolution that are likely to be displayed will be strongly influenced by the context within which the conflict occurs" (p. 10).

## Rules

Rules research attempts to explain how social order is created and maintained. Along with other perspectives, the rules perspective posits that human behavior is not haphazard; rather, it exhibits regularities. However, according to the rules perspective, while some regularities are governed by mechanistic forces and external

constraints upon courses of action, most are governed by repeated patterns of action. Bormann (1980) argues that communicative behavior is composed of movements that can be differentiated physically and actions that can be differentiated socially (patterned). Small group interaction can thus be seen as an implicitly structured activity, structured by the rules that govern interaction and behavior. Rules as a methodological tool are ways of categorizing behaviors and interaction, of making sense of ongoing group interaction. Rules are also used by actors to generate behavior. Actors make active choices of rules, letting the rule guide the ensuing behavior.

Bilmes (1976) argues that the study of rules can shed light on the nature of social order in general. He describes social order as comprised of two concepts: differentiation and patterning. Differentiation involves "distinguishing among phenomena, either by arranging them on a dimension according to the degree to which they possess some attribute, or by placing them in categories according to their different attributes" (p.50). Patterning involves recognizes the "cyclic nature of interaction," as it must either begin with or result in differentiated phenomena, explained by the linkages between interactions and events. Given any distinguishable, bounded event, patterning is that event's place in time and space. When a researcher can first differentiate an event, and then tie it to past, present, or future pattern of events, that researcher has some power of predictability. Identifying rules is a form of differentiating interaction, while applying rules is a form of patterning.

Definition. The rules approach provides a framework for understanding interaction that incorporates both individual actions and background conditions as situational variables. Shimanoff (1980) defines a rule as "a followable prescription that indicates what

behavior is obligated, preferred, or prohibited in certain contexts" (p. 57). A generic form of this rule would be: Given conditions C1 to Cn, if person (1) behaves to person (2), then person (2) responds (behaves (2)). This definition incorporates a number of characteristics, three of which will be discussed here. Rules are 1) followable; 2) prescriptive; and 3) contextual.

The idea that rules are followable implies that they influence and guide social action, but not in a deterministic manner; rules may also be broken. This notion narrows the sphere of influence to controllable phenomena. Rules specify how actors may control their behavior subject to context. Mishler (1979) argues that actors are not governed by rules, but that they are users of rules. Rules constrain behavior, but they are also resources for social action.

Their prescriptiveness is a characterisitic of rules that distinquishes them from laws. Prescriptiveness implies that some specific behavior should happen and that a deviation from this behavior is subject to evaluation. It implies that actors have a choice to follow rules or not, with deviation having some consequence. Any time we explain behavior with rules, we acknowledge that actors "could have done otherwise."

Rules are also contextual. That is, actors apply rules subject to their interpretation of the situation of action. Rules operate subject to conditions that determine their applicability. So rules apply in some cases and not in others. As Shimanoff notes, "a rule is a rule before, during, and after an event, but conditions indicate when a rule is operable"(p. 46).

A rule must apply in more than one situation to be considered a rule. Even though a rule is contextual, it is not unique to single situations: hence, a rule covers "types of acts." Second, rules are

abstractions that actors must "interpret into" situations (e.g., with the "rule of reciprocity," an actor must decide what things count as "repayment" for others' "goods."). Obviously, the more generalizable the rule, the more it may be used to predict and explain behavior across situations. However, more generalizable rules are less precise. Cushman & Whiting (1972) explain this tradeoff in terms of rule range and rule specificity. Rule range refers to the number of cases to which the rule applies. Rule specificity refers to how specific the behavioral prescription is. They posit an inverse relationship between the two conditions. This relationship in a consideration that guides research outcomes.

Communication scholars have applied the rules perspective to interpersonal and organizational settings with some success (see, for example, Harris and Cronen, 1979; Morris and Hopper, 1980; Schall, 1983). Sigman (1984) claims: "These rules are not causal explanations of behavior and are not variables wholly deterministic of the specified behavior. Rather, they describe the choices or options available to the communicators in producing acceptable, unacceptable, preferred, prohibited, or whatever behavior under specified contextual conditions"(p. 34).

Rules as Explanatory. The majority of rules studies seem to assume that the power of the approach is in description. That is, researchers attempt to identify sets of rules, hopefully with some internal coherence. These rules are then used as a reference point for understanding communication behavior. While being able to delineate specific rules is interesting and useful, it lacks generalizability across contexts, or even within a context but across conditions. One tends to end up with laundry lists of rules, lists that aren't very useable in themselves. We would argue, rather, that

the description of a set of rules for a given context is only one step to a study from this perspective. Following description, rules need to be explained, applied, and derived from the underlying social structures.

With Chomsky (1965), Cicourel (1974), Giddens (1979), and others, we would argue that rules cannot simply be described in lists or sets. Researchers must address two more fundamental problems. First, we must attempt to identify the generative system which underlies any set of rules we derive for a particular context (Chomsky, 1965, Poole, 1983). That is, we must address the question: where do these rules come from and what makes actors accept them? Second, we must account for how actors apply abstract generative rules to specific context, i.e., how they recognize that abstract rules apply to a given context and how they adapt them to that context (Cicourel, 1974). First we will discuss generative systems and how they might be identified and validated. Then we will discuss how to characterize actors' applications of generative systems in context.

Generative Systems. A generative system accounts for the existence of specific observed rules and is, therefore, a more powerful and general explanation than are the lists of rules preferred by most communication researchers. In its simplest form, a generative system outlines how a phenomenon originates, or generates, out of some other phenomenon. It is described in the form of a hierarchically ordered set of rules. In this study, we attempt to explain conflict interaction via rules, and link rules to underlying structures. A list of rules, abstracted in different forms, is presented as an explanation of interaction, with the rules producing the ensuing interaction. Thus interaction is an activity framed by rules, a form of action constrained by an underlying system, the rules.

An adequate generative system would hold across contexts and could be used to explain rule-governed behavior in many situations. Unlike generative systems in linguistics, which represent cognitive capacities, a generative system for conflict rules would be a social structure. Therefore it has the potential to tie accounts of conflict to more general social structures.

A generative rules theory would depart from Chomsky's model in specifics, but Chomsky's logic and explanatory mechanism serves as a model. In another paper, Poole (1983) describes generative theories. We will cite at some length from that paper.

> For Chomsky, a transformational grammar has two syntactic components that explain an individual's linguistic competence: a base component and a transformational component (Newmeyer 1980). The base component is made up of phrase structure rules and lexical rules that determine the deep structure of each sentence. The transformational rules convert the deep structure into various surface structures. Both base and transformational components are formal systems; there is no claim that they correspond to features actually in subjects' heads. Since more than one formal grammar can be developed, Chomsky suggests two tests of adequacy for evaluating proposed grammatical elements. At the level of descriptive adequacy a generative grammar should be able to account for linguistic forms that native speakers would consider proper usages and should "specify the observed data (in particular) in terms of significant generalizations that express underlying regularities in the language" (Chomsky cited in Newmeyer 1980, p. 83). To satisfy the stronger criterion, explanatory adequacy, the theory should be able to specify the principles underlying the native speaker's intuition.
>
> Like Chomsky, the Generative perspective presumes there is structure underlying particular, contingent events and observations. It looks for order under changing events and in deep structures finds an analog to the Deterministic view's stable structures. However, the Generative perspective does not regard structures as "automatic" determinants of group activity: Actors

apply the generative rules and draw on their knowledgeability in creating surface features, so the action emphasis of the Emergence perspective is also incorporated.

Cicourel's (1974) study of the negotiation of status and role uses transformational rules to explain how actors determine whether status categories or norms apply in particular situations. For Cicourel, the norms and status categories that make up common knowledge are surface rules. In the process of generative behavior from the deep structures that formulate their intentions, actors use transformational rules "to recognize the relevance of surface rules and convert them into practiced and enforced behavior" (1974, p. 51; see also pp. 33-38). These transformational rules represent the member's "sense of social structure" and include features such as "the reciprocity of perspectives" — which enjoins members to assume they share a common perspective and temporarily disregard any differences — and "normal forms" — typifications of social structure or utterances that provide models for behavior. These rules are advanced as "invariant properties" that pertain to the practical reasoning involved in acting and in understanding others. Ideally, researchers could identify a set of transformational rules sufficient to explain how a basic set of normative and status categories could be employed across the whole range of group activities.

Lidz's (1981) attempt to translate Talcott Parson's functionalist sociology into a transformational framework suggests an important alternative to Cicourel's approach. Lidz argues that Parsons's four families of circulating social media — money, power, influence, and value-commitments — and the four general action media — intelligence, affect, collective sentiment, and collective representations — can be interpreted as both deep and transformational components. The forms these media take and the processes governing their circulation (which are socially defined) determine the forms social action can take. In effect, the media are generative rules that shape deep structures and their transformation into particular activities. The forms power can "normally" take in a group (for example, the legitimate authority of the chairperson) limit the ways in which power can be exercised and transform members' impulses to control the group into particular forms of behavior (for example, making a motion within the rules set down by the chair). Lidz's analysis assumes that social structures can act as generative rules and the same structures serve both as deep and transformational rules. This is in sharp contrast to Cicourel, who clearly separates deep and transformational levels and argues that generative rules are cognitive, not social, properties.

Because it is social, Lidz's generative framework is open to change: when members alter social structures, so too they alter generative rules. This contrasts with Cicourel's transformational system, whose rules are presumed to be invariant (with the possible exception of normal forms). At base, however, both genres of generative theory are conservative; deep structures are viewed as stable and fundamental, as fixed explanatory principles underlying contingent behavior. If the social structures in a generative framework change, they are assumed to change slowly; they bias the system toward their own preservation.

Whether deep structures are cognitive or social, both causal and interpretive elements combine in Generative explanations. The causal aspect is explicit in the generative mechanism: base and transformational rules determine surface behavior. Moreover,

the Generative perspective also allows for causal effects of unintended consequences through the complexities of generative rules. These causal effects operate through the active process of production of surface structures: actors' intentionality is assumed to drive the generative process, and their interpretations of both context and rules guide their use of generative frameworks. Hence group activity is explained as an active process strongly conditioned by the generative rules.

In general outline, the research strategy implied by the Generative perspective is similar to that of the transformational linguists: specify a system of deep and transformational rules, collect instances of observable behavior, and test the rule system by ascertaining whether it can generate surface patterns. The deep and transformational rules are generally worked out during observations of group behavior; they represent an interlocking set of "basic" rules that can be used to explain members' adaptation to particular contexts (Cicourel 1974, p. 46). These rule systems can be evaluated at both of Chomsky's levels of adequacy. At the level of descriptive adequacy the system ought to be able to motivate an interpretive account of members' practical reasoning and use of surface structures such as Cicourel (1974, chap. 5) provides. At the level of explanatory adequacy the system should imply general explanatory principles that are both usable in qualitative accounts and empirically testable. For example, assume we are studying the transformational properties of Lidz's "power" medium. Assume further that legitimate authority and the rules, procedures, and so on, involved in using it constitute the accepted form of exercising power in decision-making groups. If this "legitimate authority complex" serves as a transformational principle, all attempts to exercise power should be translated into legitimate terms, a prediction that is, in principle, testable.

Perhaps the greatest strength of the Generative principle is the systematic and parsimonious explanation it gives for members' ability to adapt to a great range of contexts. It melds recognition of the importance of human action with a powerful generative logic, providing a resolution of the antinomies inherent in the Received view and the Emergence perspective. The Generative perspective also has a satisfying explanation for how structures can persist over time: The level of deep structure provides continuity, while the surface level exhibits contingency and change. The operation of this generative system offers a penetrating explanation of the order underlying members' production of group structures, while at the same time allowing members an active role in this process.

Adaptation of Rules to Context. As noted in the excerpt, it is not sufficient to derive a formalism. We must also give an account of how members link that formalism into concrete contexts. Cicourel (1974) tries to lay out formal properties for this adaptation. However, his attempt does not give very exact accounts of how contextualization occurs. Instead, it stays at a very general level (Clegg, 1975). We believe it is more fruitful to look in the group's

context itself for cues that guide contextualization. Characteristics of the immediate situation are the best guides for applying abstractions, as ethnomethodolists have argued.

Two features of the situation serve as guides for contextualizing rules. 1) Members' assessments of the "conditions" governing the situation: Attached to all rules and to the generative systems underlying them are conditions that determine whether they are applicable or not. We will attempt to specify conditions that govern whether certain base or transformational rules apply. Only when these conditions hold is a particular generative pattern applicable. 2) The group's "culture": The actual content of particular rules is determined by the group's specific history. The same underlying generative structure might generate one rule, in an authoritarian group -- "Under conditions C1,....Cn, the leader can interrupt any member" -- and a somewhat different rule in a democratic group -- "Under conditions C1,...Cn any member can interrupt any other member." In this case we will define culture as the basic operating philosophy and climate of the group. These general principles will determine the specific content of rules derived from basic generative principles.

## Methodological Implications for Case Studies

### Identifying and Understanding Specific Conflict Rules

Overview. The preceding discussion implies that we go through four steps in identifying rules: indentification, verification, development of a formal system, and test of the formal system (see table below for points of discussion in this section). There are methodological constraints at each of these steps. However, one point must be stressed: At each step in design, the reasoning and analytic choices must be grounded in the original data. In formalization of

rules we move to a more abstract level, but at each step key choices are referred to data in an attempt to maximize the adequacy of the model.

In general terms, the operation involved in each step may be outlined as follows:

A. Identification of Rules

1. Identification of rules from Observation, Discussion, and Questionnaires

B. Verification of Rules

2. Insider Confirmation of Derived Rules

3. Comparison of Rules across Groups

C. Development of a Formal Generative System

4. Translation of Rules into Standard Grammatical Form

5. Identification of Patterns and Underlying Binarisms

6. Re-expression of Rules into Formal Language

7. Identification of Underlying Conditions and Derivation of Transformational Rules

D. Evaluation and Assessment of the Formal System

8. Descriptive Adequacy by

a) Applying Rules to Context

b) Generation of Possible Rules given Conditions

Identification of Rules. The importance of context in rules analysis places an important methodological constraint on any investigation. Rules must be studied naturalistically rather than experimentally. Research tools can range from observation and interviewing to historical analysis of organizational documents. Given that rules derive their meaning from the participants and the

context, a combination of these methods in order to derive a "thick description" is indicated as a logical design for research.

The case study method is ideal for generating the detailed data necessary for identifying and verifying rules. Many of the common arguments against case studies (problems with replicability, lack of generalizability) are irrelevant in this case, since rules are context-specific at this level of analysis. In this case study, the limited number of participants can be justified by recognizing the value of thick description, the contextual nature of rules, and the use of multiple measures of analysis.

The notion of "thick description," is discussed by Geertz (1973). He presents thick description in a discussion of ethnographic method, citing three characteristics, each building on the preceding characteristic. They are: 1) description is interpretive; 2) what it is interpreting is the flow of social discourse; and 3) the interpreting involves trying to rescue the "said" of discourse from its occasion (p. 20). This is obviously a process-based activity.

Although the lack of a strong focus on outcome measures might make this study less pragmatically significant, the communication rules approach allows the researcher a theoretically grounded, microscopic framing. The nature of rules research demands this framing, and as discussed previously, can limit a study if care is not taken to link the details to larger, more macro-societal phenomena.

Verification of Rules. The case study allows for a research design to be closely grounded in context, but does not guarantee that researchers will identify the correct rules. Verification, or "insider confirmation" is necessary to insure the representational validity of derived rules and categories. Using Bilmes' distinction, verification would be the link between differentiation and patterning. That is,

while differentiation is the identification of rules, and patterning is the linkage of the rules to social structures, verification serves to ground both to the original data, as well as provide a means for validating the results.

Evered & Louis (1981) characterize research designs as either "inquiry from the inside" or as "inquiry from the outside." Rules theory implies that to "do" rules research, one must approach inquiry from the inside. Yet in practice an a priori category system, the rules framework, is applied to the interactions and behaviors of participants. While any rules that might be identified emerge from ongoing interaction, the usefulness of the rules research stems from the typology used to frame interaction. Following Bilmes' distinction, differentiation is the identification of rules in context, and patterning is the linking of the rules to some structure or process. In order to predict and/or generalize results, both must be present in research design. But linking the rules to structures or processes runs the risk of distorting subject meanings.

Since identification of rules is viewed here as an intermediate step rather than a final result, it is crucial that the rules identified are "true" to the context they were derived from and to participants's meanings. Insider confirmation, by interview, discussion, and post-test, allows for verification of the representativeness of the rules.

Comparison of Rules across Groups. Implicit in the use of thick description is the notion of situated action. Following identification and verification, rules can be compared and contrasted between groups. The meaning of the rule is furnished by the larger framework, which often includes relevance of the rule to group task, purpose, and organizational functioning. Comparison of rules within

one organization but across two groups allows for a less strong focus on the specific context, since it is to some degree shared by both groups. A rule can be understood by its fit into underlying conditions and overarching structures, and both frame the context. A list of insider-confirmed rules is contextually-constrained. In order for results to be generalizable, they must be removed from their constraining context and analyzed. This is accomplished by abstracting context-bound rules into a formal generative system. The system that we propose abstracts rules from context, yet accounts for its importance, and ultimately relies on it to verify the generative system.

Development of a Formal Generative System

There are four moves that need to be made in the development of a formal generative system: 1) Translation of rules into standard grammatical form; 2) Identification of patterns and underlying binarisms; 3) Re-expression of rules into formal language; and 4) Application of underlying conditions to rules. Each of the four must be closely linked to the actual data, so that the system represents subjective meanings accurately. While these four moves are roughly sequential, it is necessary to cycle through a number of refinements so that the resulting formalism has both descriptive and explanatory power. Implications of each move will be discussed here.

(1) The first move, translation of rules into standard grammatical form, is a necessary step in setting up data for comparison. It involves re-expressing rules identified in the first three steps in a form that allows comparison and contrast of rules. This facilitates the derivation of an abstract system from the derived rules. For example, as expressed originally, one rule might be: "If a group member of a lower organizational position disagrees with a

group member of higher organizational position, then the member with higher position must support her or her own statement, but not justify it." Re-expressing that rule in a standard form would be: Given conditions (C1 to Cn), if a low position member disagrees with a high position member, then the high position member supports. For the validity of the re-expressed rules, it is crucial for the researcher to refer back to the actual data from group interactions, as well as apply background knowledge gained as a participant observer. It is necessary to use the language of participants as much as possible, and to include all rules generated in the first three steps. The more diverse the set of rules derived in this step, the better the formalism.

(2) Following re-expression into standard grammatical form, the next step is accomplished by comparative analysis of the resulting rules. This step first involves identifying conditional, behavioral, and person property variables. Conditional variables describe conditions governing operation of rules, such as urgency or contention; behavioral variables describe behaviors in rules, such as support or disagree; and person property variables describe participant attributes, such as knowledge or authority.

There are two basic types of principles that determine the content of rules: equivalencies and binarisms. Whereas binarisms make distinctions, equivalencies show likenesses. Underlying patterns and binarisms can be identified using lists of conditional, behavioral, and person property variables. Binarisms represent the basic distinctions members make in understanding and acting. They are dualisms, constructs representing opposite poles of perception and evaluation (Levi-Strauss, Kelly). For example, active::passive, male::female, or strong::weak might be relevant binarisms.

Equivalencies are defined here as terms that are semantically different but representing the same underlying construct as it may be exhibited in a particular context. For example, formal position (high or low,) authority/control (high or low,) and knowledge (high or low,) all represent different person properties that may be enacted in a rule with the same result (i.e., they operate equivalently). Thus they can be defined as an "equivalency set," indexing the concept "authority."

(3) Then we re-express the rules into formal language to reduce the set of possible rules to a few more basic forms. This is accomplished in two steps. First, binarisms and equivalencies can be substituted in for variables. Then binarisms can be re-expressed in terms of the valence attached to the term (+/-) so that rules are be stated more abstractly, leaving out detail of context for the sake of formal comparison. This allows for all rules to be restated in a formal language. For example, using the same rules as above, the standard grammatical form is: Given conditions (C1 to Cn), if low position disagrees high position, then high position supports. The formal expression of this rule, including valence, would be: Given C1...Cn, If position (-) disagrees (-) position (+), then position (+) supports (+). Notice position (high/low) is a binarism, in which high is replaced by (+) and low by (-). Further, behavioral variables can be replaced by their positive or negative connotation, so that the variable "disagree" would be (-) and the variable "supports" would be (+). In its most abstract form, the above rule might be expressed as: Given C1...Cn, if (-) (-) (+), then (+) (+).

(4) Once rules are expressed in formal language, they can be grouped into sets based on background conditional variables. It is at this stage that the system can be evaluated by linking it back to the

actual data. This is accomplished in several steps. First, conditional variables are identified for each rule. Then rules can be grouped together based on common conditional variables. This defines a number of "sets," composed of different rules with common conditional variables. Once rule "sets" are defined, they can be linked back to the data.

Given a particular situation, it is possible to identify the conditions active and influencing interaction. Using the rule sets, for any combination of conditions, only certain rules will be choices for actors for guiding behavior. For example, if conditional variables such as urgency, jurisdiction, and contention were all operating, then the set of possible active rules would include only those rules that operate under those three conditions. The rule listed in the example above would be one rule operant in that rule set.This step assumes that actors make choices, based in their interpretation of the situation. Different interpretations would make different rule sets viable. This element of uncertainty points to the active role participants play in interaction.

Ideally, rule sets group rules together by conditions, so that there are more general and more specific rule sets, as well as commonly used and less commonly used ones. The predictive power of this method lies in being able to identify, using participants' framing, the conditions for a given situation, and thus the possible choices of rules that might be alternative explanations of interaction.

Evaluation and Assessment of the Formal System

All of the moves made in the development of the formal system are systematic, and tied as closely as possible to the data. Their accuracy in terms of description and prediction are dependent on the

veracity of identification and verification of the rules themselves. This point is concisely described by Poole (1983, see excerpt) using Chomsky's tests for a transformational grammar. Here we will focus on descriptive adequacy, which is present when the generative system accounts for the actual rules used by the participants. This is addressed in part by insider confirmation of rules and representativeness of grammatical form used. If the system has descriptive adequacy, then, in a given context with specified conditions, only the rules set associated with those conditions should be operant for participants in guiding behavior. Therefore we can predict behavior in segments of interaction and check predictions. An additional way to assess descriptive adequacy would be taking the generative system back to subjects for evalation and reactions.

## Procedures

This study attempts to use a variety of methods in order to approach conflict interaction as patterned, rule-governed, and cyclic. We took as our task the demonstration of the means used in everyday life to subjectively create an agreed upon or negotiated social order. In this perspectve, human beings do not merely respond to the social world, they create it through continuous interactions.

Procedures and analysis can be broken down into phases or steps that attempt first of all to identify rules, then to verify them. Following insider confirmation, rules are categorized thematically by content analysis and analyzed based on their situationally-defined context. The list of insider- confirmed rules is then abstracted in a formal system that incorporates the underlying principles that generate the rules. The steps followed in this process are detailed in the outline below.

A. Identification of Rules

1. Identification of rules from Observation, Discussion, and Questionnaire

   a. Access to Organization & Initial Group Contact

   b. Observation of Group Meetings (field notes)

   c. Identification of Conflict Episodes (content analysis)

   d. Questionnaire about Conflict Interaction, Rules

B. Verification of Rules

2. Insider Confirmation of Derived Rules

   a. Group Discussions of Questionnaires

   b. Unstructured Interviews with Key Group Members

3. Comparison of Rules across Groups

   a. Content Analysis of Transcripts

   b. Comparison of Derived Rules

C. Development of a Formal Generative System

4. Standardization of Rules in Grammatical Form

   a. Generation of Separate Lists of Conditional, Behavioral, and Personal Property Variables

   b. Derivation of a Form based on Common List

   c. Adaptation of all Rules into Common Form

5. Identification of Patterns and Underlying Binarisms

   a. Generation of lists of Equivalencies and Binary Oppositions

6. Re-expression of Rules in Formal Language

   a. Re-expression of Rules in Terms of Binarisms and Basic terms of Equivalencies

   b. Re-expression of Binarisms and equivalencies in more Basic Valence Forms

c. Grouping of Re-expressed Rules in Terms of Similar Forms and Oppositions.

7. Adaptation of Underlying Conditions to Rules, Grouping of Rules in Conditional Sets

- Development of Base Rule Sets based on Conditions

E. Evaluation and Assessment of the Formal System in Context

8. Assessment of Descriptive Adequacy

9. Generation of Possible Rules given Conditions

10. Identification of "Philosophy" of Group and Determination of How this Influences Translations of Rules in Practice.

Prior to covering the steps just outlined, we will discuss the sample.

Nature of Sample.

This study focused on two interconnected groups within the same organization. Justification for a small sample size was discussed above. However, in addition to points made about thick description and contextuality, we would stress the power of comparative study. In this study, this sample was ideal for addressing the research questions, since a microscopic level of analysis was demanded. A sample with more groups, but fewer ties between those groups, would have added more empirical power to this study, but would have vastly complicated data analysis.

The organization was a centralized business office for a large state subsidized institution. Following Payne & Cooper's (1981) typology, the two groups might be identified as a policy-making group and a project group (or task force). Both groups had regular membership that met on a weekly basis. They made decisions on a

regular basis, had members of roughly equal standing within the group (to facilitate interaction). Both groups had been formed and had been active for some months prior to the start of this study, and thus had well-established patterns member-roles in meetings Also, both the project group and the policy-making group's activities revolved around the same project. Factors inherent in the project, such as large scope of impact, major organizational changes to be implemented, and a strict deadline, made it an ideal forum for examining conflict interaction.

The project group had twelve members. It was a highly structured group and had a within- group organizational chart to which members adhered. There was a recognized group leader, appointed to that position, and at a higher organizational level than the group's members. There was a steering committee that reviewed the decisions and directions of the project team, whose members served in turn as conduits of information to their respective administrative areas. The group members had been part of the group for varying amounts of time, some for several years, but all had participated for at least seven months preceding the start of this study.

The policy-making group had seven members. It existed at a slightly higher organizational level than the project team, and had fairly unstructured group meetings. The group leader was the supervisor of all the group's members, and at an organizational level equal to the project group's leader. All group members had belonged to the group since its inception, 5 months preceding the start of this study.

While the two groups were both geared to the same task, implementation of the project, they dealt with different aspects of it. The two groups shared one common member, by design, as the

conduit between the project team and the policy-making group. He was designated as the project team's representative to the policy making meeting, with the emphasis on upward-channeled information to the policy-making group. Additionally, the policy-making group received the minutes from project team meetings, and reviewed them in detail at the start of each meeting, with the linking member relaying back to the project team any suggestions, criticisms or comments. The project team leader was an occasional participant at policy-making meetings when an issue that needed input was coming up for discussion. A final link between the two groups was found in a common supervisor between the group leaders, an occasional member at the policy-making group meetings, and on the steering committee for the project team.

Recording and Transcribing. The purpose for attending group meetings was to discover conflict rules; therefore, the most important observable element was conflict interaction. Recording interaction and transcribing interaction were important steps in building a strong data base to confirm each step of analysis. Field notes from group meetings were derived from tape-recorded and transcribed interaction. In addition, observed details in behavior, reactions, tone and volume were parenthetically noted in transcripts. Other factors such as attendance, seating arrangement, and individual mannerisms were also noted.

Field notes were collected for both groups over the same period of time, with transcripts of meetings covering a time frame of approximately two and a half months, excluding initial contact and the first group meeting. Total hours of observation covered all group meetings during the period of study. Since one group cancelled several meetings and the other group held several extra sessions (Project group: 8 hours, 42 minutes; Policy-making group: 15 hours,

54 minutes), the data set has more information on one group than on the other. However, the data set represents a completely inclusive accounting of group interaction over that period of time, at the same stage in development of the project. This makes it ideal for comparative study.

Identification of Conflict Episodes.

We identified conflict episodes from group transcripts as the window within which conflict rules would be operating. Via content analysis, group interaction can be characterized by amount of conflict, as well as direction of conflict interaction. The grounded nature of rules can be examined by looking at similarities and differences in conflict interaction between groups. In a separate analysis, not reported here, content analysis was used to try to link rules to constructive or destructive direction in cycles (See Billingsley, 1986, for details).

Validity remains a critical issue for the researcher. The central concern is with the perceptions and interpretations of the interactants based on a common, socially shared set of rules. Thus validity depends not only on the link between coding categories and theory, but also on the correspondence of the meanings as coded and the meanings as interpreted by the participants. In other words, the category scheme developed must fit both a theoretical framing and the contextually defined language of the participants. Validity was maximized by starting with a theoretically defined typology. Operational definitions incorporated participants' language by identifying common synonyms.

Conflict was operationally defined as any disagreement between members. This definition is based on reported group perceptions of conflict (Putnam & Wilson, 1982; Pood, 1980; Louis, 1977).

Theoretically, this operational definition is rooted in the assumption that underlying conflict, for whatever reason, is manifested in interaction as disagreeing statements. In interaction, interviews, and in the questionnaire, the term "disagreement" was used, as it is recognized as less threatening for group members.

The unit of analysis was defined as each disagreeing statement. More than two disagreeing statements in sequence were defined as a conflict episode. Episodes were defined in this way to try to determine escalating and de-escalating cycles and themes to conflict interaction (see Billingsley, 1986 for details).

In analysis, statements were coded across two broad dimensions, constructive and destructive conflict. Behavior categories were established by combining accepted definitions within conflict literature with observed group conflict behaviors and participant input from the unstructured interviews. A pretest of the categories chosen was conducted to validate these distinctions. Three naive coders (an undergraduate, a veterinary student, a neighbor) were able to correctly match the behavioral label with an example of such a statement (94 % exact agreement.)

In coding the discussions, coders were asked to identify each disagreeing statement as defined. Three or more consecutive disagreeing statements in the same dimension, with at least two interactants participating, constituted an escalating cycle in either a destructive or a constructive direction. Once direction was established within an episode, two or more consecutive statements in the other direction constituted a de-escalating cycle in that dimension. Within this analysis scheme, random disagreeing statements were counted and coded, but not considered episodic. This was an

important factor in characterizing the differences between groups (see results).

A pretest was conducted on one hour of group meetings from each group, with the disagreeing statements already identified and numbered. Coder reliability was high, with 88.4% exact agreement across three coders with minimal training.

Identification of Rules.

Identifying and Understanding Specific Conflict Rules. Any study that focuses on communication rules must be grounded since the rules themselves are part of the underlying social structure and do not operate outside of their defined context. Thus the case study is one feasible and justifiable way to access the detailed accounting of interaction needed to identify rules.

Four basic methods were employed in collecting primary data: participant observation, interviews, and questionnaires, and content analysis. These methods were chosen because of the importance of context and contextually- situated study (Geertz, 1973; Folger & Poole, 1984; Van Maanen, 1983; Mishler, 1979). Thus, the focus of data collection in this study is on the interaction, the "said" of the discourse.

The first method was participant observation. Transcribing and recording procedures are detailed above. Shimanoff (1984) suggests two common-sense strategies for identifying group rules. The easiest way to identify rules is to ask group members what their rules are. These disclosures can then be used to infer rules. Some rules, however, may not be consciously acknowledged by group members. Observing group interaction provides a second avenue. Because group members will adhere to rules, repetition of a behavior constitutes

preliminary evidence that a rule exists. Recurring patterns can be established and repeated behaviors will be more obvious.

Following observation of group meetings and transcription of field notes, a questionnaire was constructed and handed out to group members. Each group's questions were a little different, tailored to their group activities and typical discussion topics. Each questionnaire consisted of open-ended questions, formatted as similarly as possible. An example of a question would be:

I have noticed from observations of group meetings that discussions about testing or training procedures might be a potential source of disagreements in group meetings. If such a disagreement were to occur, describe how you would react. Be specific about practices, unwritten guidelines, norms, or rules that might come into play here. How would you describe your role in this situation?

Several considerations figured in the construction of the questionnaire. Personalizing each question to the group's topics of discussion allowed the members to respond with specific examples, each of them closer to rule-governed behavior than a generalization. In the design of this instrument, we also considered the educational level of the respondents. All members were fairly homogeneous, being well-educated, career-oriented individuals with at least a college education. Phrasing each question in an open-ended format allowed each to use his/her own words and incorporate any conclusions they reached.

This questionnaire was piloted on a number of quality circle groups with some success in obtaining conflict rules from them. Even though the quality circle members were not as well educated as the sample groups, they addressed the open-ended questions at some length, and incorporated examples and personal opinions into their responses.

The questionnaires were handed out to members in group meetings in the same week, and responses were collected individually within ten

days. Two members, one from each group, declined to fill out the questionnaire, but agreed to be interviewed over the same material.

Rules were identified through combining the data gathered in the preceding steps. Based on observation and questionnaires, a list of 44 tentative rules was generated. Many of these rules were based on descriptions given by group members on the questionnaire. Others were intuitive guesses based on observations of meetings. Once tentative conflict rules were identified, they were subjected to rigorous examination, in group discussion and interviews, in an attempt to end up with a list of insider-confirmed conflict rules.

Following collection of the questionnaires from group members, each group allowed the researcher some time in group meetings to ask some questions informally. This was done with the underlying goal of stimulating group discussion about responses on the questionnaire, to allow members to reach consensus or disagree about each situation posed, and possibly even to elicit "conflict about conflict." These sessions lasted approximately fifteen minutes in each group, and the success of the strategy was mixed at best.

Members of the project team were not comfortable revealing their responses. While the questionnaires were, for the most part, filled out in detail, the discussion of responses was extremely vague, not focussing on specific examples or revealing any discrepant opinions. The project team leader even mentioned during the feedback session that talking to each member individually would probably be more helpful.

The policy-making session was helpful even though three of the seven members were absent the day of the discussion. A concern was raised by one member at the feedback session that discussion of their responses might cause disagreement between members that might hurt

overall group cohesiveness. This comment slowed down the discussion until the topic changed several minutes later.

To compensate for and supplement the group discussions, unstructured interviews were conducted to elicit rules and verify questionnaire responses. Interview guides were individualized for each interviewee based on his/her responses to the questionnaire.

Next it was necessary to get "insider confirmation of rules (Shimanoff, 1980, Schall, 1983). Hymes (1980) argues that insider-confirmed rules provide a "truer" accounting of interaction.

Three sorts of evidence were used to judge insider confirmation of rules. First, several rules from the tentative list were substantiated in the brief group discussions. Second, questions on the interview guide asked for confirmation of suggested rules, as well as interviewee examples of types of typical behaviors. A third method of confirmation came at the end of the study. Several key informants from each group examined the researcher's final list of rules, responding to whether or not they felt such a rule might be in operation in their group. Excerpts from conflict interaction were also presented, along with choices of possible rules operating, so that informants could confirm or disconfirm which rule was operating in a given instance. Thus, a rule was only retained on the list if it was mentioned on the questionnaire or in an interview, verified by informants, and the researcher could identify two or more examples of it in operation from transcripts.

Development of a Formal Generative System

Once a single list of insider confirmed rules was achieved, the next stage was the development of a formal generative system. Its purpose was to allow the researchers to systematically abstract rules from context, analyze them, and then reapply them to context.

Translation of Rules into Standard Grammatical Form. Starting with the final list of insider confirmed conflict rules, researchers employed a standard grammatical form (see, for example, Shimanoff, 1980, Cronen & Pearce, 1982). Rules were re-expressed into the form: C1...Cn, If X, then Y. For many rules, this entailed no change; for some, major rewrites were required. Care was taken to use language of participants and not to distort the meaning of the rule.

From the standard form, three possible sets of variable constructs present in each rule were isolated: background condition variables, behavioral variables, and person properties; where background condition variables describe characteristics of the situation that specify or limit rule operation, behavioral variables describe types of behaviors enacted based on a rule, and person properties describe attributes of involved parties. Based on these definitions, both researchers generated separate lists of conditional, behavioral, and person property variables, relying on the list of rules and possible synonyms. Then, relying on background knowledge of the case and examples from transcripts, researchers determined a common list of constructs for each variable set. These three lists of variables were used in the next step of development, identification of patterns and binarisms. They were the fundamental variables employed in the study.

Identification of Patterns and Binarisms. Researchers identified patterns and binarisms in an attempt to reduce the list of rules to its smallest set. In addition, employing binarisms and equivalencies allowed the researchers to compare variables across rules. This step in the development of a formalism relied heavily on comparison of the different rule statements. Several patterns were identified by generating lists of binarisms and equivilency statements.

A binarism is a binary contrast, representing a characteristic that can be described by two modes of action or being, e.g. active: passive, positive:negative. Any behavioral or person property can be prepresented in terms of one pole or the other. This can be operationally designated for any binary variable by indicators such as high/low, yes/no, or positive/negative. A binarism was a valuable distinction in this study because it allowed the researchers to contrast rules with opposite binarisms, and to attribute valence to the binary variables.

In addition to a basic binary unit, nested binary units are defined by oppositions within oppositions. That is, given the binary unit of high/low, each might be characterized by both a passive and an active mode. The binarism would then be stated as high (passive/active) or low (passive,active), the four possible modes of one distinction. We hypothesize that nested binary units exist for behavioral varibles, with the defined variables representing the "active" mode of the binary unit. For example the binarism of agree:disagree represent positive and negative behaviors, both active choices. Passive choices for this nested unit might be accept:withdraw.

Equivalencies were identified as variables with different semantic meaning but derived from the same underlying construct. An example of an equivilency statement would be: ( E = authority knowledgeable = high position). All have the same impact in a rule statement, but imply different yet equivalent person properties. Equivalencies are significant relationships to establish as they may allow researcher to further reduce the list of rules.

Re-expression of Rules in Formal Language. Following rules theorists such as Pearce & Cronen (1976) and Cushman et al. (1982), a

formal equation was developed as a way to abstract rules from context. This formal equation uses deontic logic to signify action and conditional statements. The equation takes the form of a conditional statement with three possible outcomes. Given Conditions Ci to Cn, if Person (1) behaves in way Bk to Person (2), then a) Person (2) reacts in way Be; b) Person (1) is reacted toward as a particular type of person Pj; or c) Behavior (1) is reacted to as Behavior (2). It is expressed in the following equation:

a) [ Given Ci,...Cn] U [ P(1) : Bk : P(2) ] > [ Pi : Be ]

where k = 1 and i = any group member

b) [ Given Ci,...Cn] U [ P(1) : Bk : P(2) ] > [ Pi : Pj ]

where i = j and i,j = 1 or 2

c) [ Given Ci,...Cn] U [ P(1) : Bk : P(2) ] > [ Bk : Bl ]

where k = 1

In the above equation, Ci = conditional variables C1 to Cn; Pi = person property of a person P, whether P = P(1), P(2), P(L) (leader), or P(G) (group); and Bk = behavioral variables associcated with Pi.Bk.

All rule statements were re-expressed in terms of one of these three conditional equations.

The next step attempted to derive as small a set as possible of "basic forms" underlying the diverse rule equations. First, we substituted binarisms terms (e.g. high::low) for the member property and behavioral variables. So, the term leader was replaced by "high." These simplified comparison of the equations considerably. If necessary, we went further, and replace binary constructs by (+) or (-), indicating their positions in the binarism. Thus we had very simple, basic rules and the binarism constructs and equivalencies were

transformations which gave content to basic rules (and thus were the means of applying them in context). For example, the rule:

Given Conditions Ci to Cn, if low position disagrees with high position, then high position restates;

was simplified to the form:

Given Ci...Cn, U Low disagrees High, High restates;

and was further abstracted to the form:

[ Given Ci,...Cn] U [ P(-) : B(-) : P(+) ] > [ P(+) : B(+) ]

After substitutions of binarisms and equivalency statements, the list of rules was compared for patterns and commonalities. We attempted to identify rule statements that were polar opposites or isomorphic.

Identification of Conditions Underlying Rules. Once we had basic rules, we attempted to group them according to similar profiles of conditional variables. We attempted to identify rule sets, which we defined as a set of basic rules that are operant under the same set of conditions. E.g., given any combination of operating conditions (for example, the conditions of urgency, contention and jurisdiction) only a certain number of rules are operant (i.e., the rules associated with conditions of urgency, contention and jurisdiction). The conditions govern actor's choice of rules in response to a given situation. This enabled us to identify basic sets of rules that are assumed to govern conflict behavior under various conditions.

Evaluation and Assessment of the Formal System.

Descriptive adequacy is present when the formal system developed accounts for the actual behaviors of the participants. There are several ways of assessing descriptive adequacy First, we could rely on specific rules derived from the generative system. It could also be assessed by generating behaviors, given specific conditions, and

verifying them in the raw data from the group transcripts (examples given later in discussion). If the generative system has descriptive adequacy, then, in a given context with specified conditions, only the rule set associated with those conditions should operate for participants in guiding behavior. Third, descriptive adequacy would hold if participants verify that binarisms and equivalency statements reflect their perceptions. Methods for assessing this would be complex, but could be developed.

## Results

Based on observation, questionnaires, and interviews, a list of insider-confirmed conflict rules was generated. This list includes seven rules common to both groups, five rules specific to the policy-making group, and with eight qualifying rules, four rules specific to the project group (see appendix for list.)

Results of the content analysis indicated the following summary information about conflict interaction in the two groups.

CONTENT ANALYSIS - SUMMARY OF FINDINGS

| | Policy-making Group | Project Group |
|---|---|---|
| Hours Observed | 15 hr, 15 min | 8 hr, 42 min |
| Mean Meeting Length | 1 hr, 54 min | 1 hr, 44 min |
| Total # Statements | 4013 | 1587 |
| Total Disagreeing Statements | 784 | 232 |
| Percent Disagreeing Statements | 19.5 % | 14.6 % |
| Percent Random Disagreements | 29.0 % | 66.0 % |
| Percent Episodic Disagreement | 71.0 % | 34.0 % |

The most interesting result shown indicated that, while both groups were roughly equal in proportion of disagreeing statements, their impact on group interaction was very different. The policy-making group had far more disagreements that were sequential, and thus formed episodes, while the project group's disagreements were more random and scattered in interaction.

A generative system is presently being developed, following the procedures laid out above. Although the analysis has not yet been completed, we can present some illustrative results. At this time, we have derived a formal equation for all rules and are laying out conditional variables to generate rule sets. Thus, evaluation of the system and application to the data is not yet accomplished. However, some summary results can be presented at this intermediate stage. Based on the list of insider-confirmed conflict rules, the following variables lists were generated, with binary statements parenthetically noted.

Conditional Variables

| Variable | | Possible Values |
|---|---|---|
| C (1) | Urgency | (yes/no) |
| C (2) | Impact | (individual/group, project) |
| C (3) | Jurisdiction | (yes/no) |
| C (4) | Contention/Challenge | (yes/no) |
| C (5) | Topic Open | (yes/no) |
| C (6) | Impasse State | (yes/no) |
| C (7) | Decision Made | (yes/no) |
| C (8) | Group Knowledge | (all know/not all) |

Person Property Variables

| Variable | | Possible Values |
|---|---|---|
| P (1) | Knowledge | (high/low) |
| P (2) | Authority/Control | (yes/no) |
| P (3) | Position | (high/low) - (equal) |
| P (4) | Leadership | (yes/no) |
| P (5) | Collective State | (individual/group) |

Behavioral Variables Categories

B (1) Disagree, Object
B (2) Threaten, Attack
B (3) Avoid, Ignore, Withdraw
B (4) Not Support, Not Accept
B (5) Probe, Question
B (6) Clarify, Restate
B (7) Support, Justify
B (8) Agree, Accept

In order to illustrate the steps followed in the generative system, the following example is presented. Starting with the rule in standard grammatical form::

> (1) If a group member of a lower organizational position disagrees with a group member of higher organizational position, then the member with higher position must support his or her own statement, but not justify it.

or

> (2) If a group member of a higher organizational position disagrees with a member of lower organizational position, then the member with lower position must support and justify his or her own statement, or else withdraw it.

These rules were then re-expressed in formal language. They would be expressed as:

(1) If low position disagrees high position, then high position supports.

(2a) If high position disagrees low position, then low position justifies.

(2b) If high position disagrees low position, then low position withdraws.

At this point in the analysis, rule statements are not categoried by conditions. Thus the second example, splitting into (2a) and (2b) is explained by different conditional variables.

Then we identified binarisms and equivilencies drawn from the initial set of rules. Some examples of binarisms would include high position::low position, high authority::low authority; etc. An example of an equivilency statement would be (E authority = position knowledge).

Following this step, we substituted binarisms and equivilences, along with valence of binarisms where possible. These were called "basic equations." Example (1) from above would be phrased as:

(1) If (-)E disagrees(-) (+)E, then (+)E supports(+).

Hopefully, we will be able to identify a relatively small number of basic equations. These will serve as our "base" components. Note that they are content free. Specific rule content, which depends on adaptation to specific context, will be generated by using equivalencies and specific situational characteristics. So for the rule expressed above, the (+) in the person property slot can be replaced by any term in the equivalency ( high knowledge, high position, high authority) to yield the original standardized rule.

When all rules have been re-expressed in terms of basic equations, we hope to identify a few basic condition profiles that will allow us to group basic rules into sets. The basic condition profiles trigger subject selection of a particular set of basic rules which apply to a give case. Thus subjects select the basic rules (base components) which apply in a given case. Within any condition profile, there will be a number of rules defined that subjects could draw upon in interaction.

Following this, it is necessary to test the formal system by using it to derive rules and behavioral predictions for the groups.

These can then be tested on portions of the group data reserved for future analysis.

## Discussion

There are several advantages to this method of analysis. There are advantages to be considered in terms of 1) rules research; 2) case studies in general, and 3) conflict research in particular.

Rules Studies. This study followed past methodologies for rules research, up to a point, and then extended them to achieve a formal theory. Formal theories have several potential advantages: (1) They require the researcher to be very precise in specifying rules, thus eliminating at least some of the ambiguities present in many rules studies. In addition, the rules specified by a formal system are linked to theoretical constructs and to deeper structures. (2) It provides a mechanism for the generation of rules. This goes a step past idiosyncratic rule lists. It also specifies key choices and mechanisms that could be falsified. We believe this is a more accurate picture of actors. They don't carry around lengthy lists of rules. They generate them in response to specific contexts. At each stage of analysis, based on definitions from the formal system, attempts were made to reduce the rules set to its smallest and most basic form. (3) Formal analysis allows us to deal with large amounts of data in a systematic way, following logical distinctions based on theoretical definitions.

The generative system, using formal modelling, allowed the researcher a great deal of systematic specificity. The model moved from the very concrete to the abstract back to the concrete. As a means of testing the adequacy of a model, this method is a rigorous test that addresses several types of validity.

Case Studies. This study pointed to both advantages and disadvantages to case studies. In its favor, the case study provides a richly detailed account of action in a specific context. Few, if any, other methods could achieve this degree of detail. Rules research required not only detailed accounting of action, but also extensive knowledge of the context. The case study is an ideal forum for meeting those requirements.

A case study can be a powerful explanatory tool for the researcher, if his or her design incorporates measures designed to enhance generalizability. The formal system is one means of doing this. Although it does "move away from the data," a formal system can be linked back by making specific predictions. Although formal analysis seems quite different from other qualitative research, qualitative research abstracts and "purifies" constructs as well. Formal analysis attempts to bring rigor and order to the abstracting process.

Conflict Research. Conflict has been identified in this study as one particular type of behavior. However, there are strong links between conflict behavior and behavior in general. By locating rules for conflict, it may be possible to link them to other basic rules for other forms of interaction. It might even be possible that there exists only one basic set of rules, the specific behaviors in terms of binarisms and equivilencies determined by the conditions operating in a specific context.

Conflict interaction is often identified as a unique form of interaction, and different from case to case. It may be possible to use a small set of rules, across situations, based on conditions that are operant, to predict behavior. Literature from past conflict studies acknowledges common conditions as antecedents to many diverse

types of conflict, from small group conflict to bargaining to inter organizational conflict. The uniqueness of the conflict interaction might be characterized by the unique choices actors make in selection of rules. The crucial link to understanding this process is the representativeness of the identified rules and related variables. These elements should be further investigated to that end.

At the start of this study, we argued that we were investigating "ordinary people doing ordinary things." By use of a formal system, we have analyzed conflict interaction. Rules were identified and analyzed as underlying generators of interaction. Participants were viewed as active choice-makers, selecting rules in specific situations that impacted on ensuing behaviors. In short, the focus of study was interaction, the most fundamental and elusive element of communication-- and of course, the most ordinary.

## APPENDIX
## INSIDER-CONFIRMED CONFLICT RULES

### I. Shared by both groups

If a group member of a lower organizational position disagrees with a member of higher organizational position, then the member with higher organizational position must support his or her own statement, but not justify it.

If a group member of a higher organizational position disagrees with a member of lower organizational position, then the member of lower organizational position must support and justify his or her own statement, or else withdraw it.

If a group member disagrees with adequate support for that statement, then it is accepted as a clarifying point or as an information-giving (group term) act.

If a group member disagrees without adequate support, then is accepted as obstructive. Members who frequently disagree without support for their stand have their disagreeing statements ignored in interaction.

If a group member avoids responding to question or request for information, group leader will follow up with probe or enforcing remark.

If a group member disagrees with a decision made outside his/her area of authority, then the group leader will support the decision made and not the interaction, regardless.

A threat of potential delay is an effective and accepted compliance-gaining tool.

### II. Policy-making Group Rules

If a group member disagrees by making a personal attack on another member, that attack is seen as humorous and is laughed off or ignored. This is always the case for a lower organizational member's remark to a higher organizational member.

If a group member affected by the topic under discussion withdraws, then the topic is dropped.

If a personal attack is taken seriously (only between organizationally parallel or higher to lower members), then the group leader will redirect topic.

Only members directly impacted by topic are considered as valid sources in disagreements.

If a member avoids challenge or question by another member, the group leader will redirect challenge or question to enforce it.

III. Project Group Rules

(This is the group with substantially less conflict. There are a number of procedural rules and guidelines that seem to effectively curtail conflict interaction. They include:

1. Clarification of information is critical and the recognized major benefit of meetings.

2. Decisions are not open to re-discussion.

3. Addressing a topic without upsetting other members is considered ideal.

4. Time frame forces changes of commitment (to a decision or agenda or program) to be unacceptable, even if better solution is obvious.

5. Compromises on standards and quality are acceptable to avoid significant delay.

6. Resolution of conflict is achieved between group leader and involved members outside group meetings.

7. The welfare of the project as a whole outweighs individual concerns or position.

8. A we/they alignment over issues (project team vs. outside) is encouraged.)

Given these qualifying conditions:

It unresolvable dilemma (through conflict) occurs, the "area expert" takes the decision lead. If the expert's choice does not receive support, the leader makes the decision.

Points of contention are introduced as information-giving and accepted as such unless challenged.

If a point of contention is challenged, then:
when a group member of a lower organizational position disagrees with a member of higher organizational position, then the member with higher organizational position must support his or her own statement, but not justify it.
when a group member of a higher organizational position disagrees with a member of lower organizational position, then the member of lower organizational position must support and justify his or her own statement, or else withdraw it.

Each individual on the team represents a number of users. If a decision unfavorable to his/her constituency is made, then the team member seeks support outside group to have the decision reversed or readdressed for discussion.

References

Bilmes, J. (1976). Rules & Rhetoric: Negotiating the Social Order in a Thai Village. Journal of Anthropological Research, 7, 45-57.

Bormann, E.G.. (1980). The Paradox and Promise of Small Group Communication Revisited. Central States Speech Journal, 31, 214-220.

Cicourel, A.V. (1974). Cognitive Sociology. New York: Free Press.

Coser, L.A. (1956).The Functions of Social Conflict. Glencoe, IL: Free Press.

Cosier, R.A. & Ruble, T.L. (1981). Research on Conflict Handling Behavior: An Experimental Approach. Academy of Management Journal, 24, 816-831.

Cronen, V.E., Pearce, W.B., & Harris, L.M. (1982). The Coordinated Management of Meaning: A Theory of Communication. in F.E.X. Dance (ed.) Human Communication Theory: Comparative Essays. New York: Harper & Row, Publ.

Cushman, D.P., Valentinsen, B., & Dietrich, D. (1982). A Rules Theory of Interpersonal Communication. in F.E.X. Dance, (ed.) Human Communication Theory: Comparative Essays. New York: Harper & Row Publ.

Deutsch, M. (1973) The Resolution of Conflict. New Haven, CT: Yale University Press.

Deutsch, M. (1969) Conflicts: Productive and destructive. Journal of Social Issues, 25, 7-41.

Ellis, D.G. & Fisher, B.A. (1975). Phases of Conflict in Small Group Development: A Markov Analysis. Human Communication Research, 1, 3, 195-213.

Folger, J.P. & Poole, M.S. (1984). Working Through Conflict: A Communication Perspective. Glenview, IL: Scott, Foresman and Co.

Frost, J.H. & Wilmot, W.W.(1978). Interpersonal Conflict. Dubuque, IA: Wm. C. Brown Co. Publ.

Giddens, A. (1976). New Rules of Sociological Method: A Positive Critique of Interpretative Sociologies. New York: Basic Books, Inc.

Gouran, D.S. (1982). Making Decisions in Groups. Glenview, IL: Scott, Foresman and Company.

Guetzkow, H. & Gyr, J. (1954). An Analysis of Conflict in Decision Making Groups. Human Relations, 7, 3, 367-382.

Hawes, L.C. & Smith, D.H. (1973). A Critique of Assumptions Underlying the Study of Communication in Conflict. Quarterly Journal of Speech, 59,423-435.

Harris, L. & Cronen, V.E. (1979) A Rules-Based Model for the Analysis and Evaluation of Organizational Communication. Communication Quarterly, Winter,12-28.

Holsti, O.R. (1969). Content Analysis for the Social Sciences and Humanities. Reading, MA: Addison-Wesley Publ.

Jablin, F. & Sussman, L. (1984). Organizational Group Communication: A review of the Literature and Model of the Process. in H. H. Greenbaum, R.L. Falcione, & S.A. Hellweg, (eds.) Organizational Communication: Abstracts, Analysis, & Overview. Beverly Hills, CA: Sage, 11-51.

Jones, R.E. & Melcher, B.J. (1982). Personality and the Preference for Modes of Conflict Resolution. Human Communication Research, 35, 8, 649-658.

Lawrence, P.R. & Jay W. Lorsch. (1969). Organization and Environment. Homewood, IL: Richard D. Irwin, Inc.

Lofland, J. & Lofland, L.H. (1984). A Guide to Qualitative Observations and Analysis, 2nd ed. Belmont, CA: Wadsworth Publ.

Louis, M.R. (1977). How Individuals Conceptualize conflict: Identification of Steps in the Process and the Role of Personal/Developmental Factors. Human Relations, 30, 5, 451-467.

Miller, G., Boster, F., Roloff, PM., & Seibold, D. (1977). Compliance-gaining Meswsage Strategies: A Typology and Some Findings Concerning Effects of Situational Differences. Communication Monographs, 44, 37-51.

Mishler, E.G. (1979). Meaning in Context: Is There any other Kind? Harvard Educational Review, 49, 1, 1-19.

Morgan, G. & Smircich. L. (1980). The Case for Qualitative Research. Academy of Management Review, 5, 4, 491-500.

Putnam, L.L. (1982). Understanding the Unique Characteristics of Groups within Organizations. Paper presented at the Conference in Small Group Communication, Pennsylvania State Univ., State College, PA, April 29-30.

Schall, M.S. (1983). A Communication-rules Approach to Organizational Culture. Administrative Science Quarterly, 28, 557-581

Shimanoff, S.B. (1984). Coordinating Groups Interaction Via Communication Rules. in R.S. Cathcart & L.A. Samavar (eds.), Small Group Communication: A Reader, 4th ed.. Dubuque, IA: William C. Brown, Publ., 31-44.

Shimanoff, S.B. (1980) Communication Rules: Theory and Research. Beverly Hills, CA: Sage.

Sigman, S. J. (1984). Talk and Interaction Strategy in a Task-oriented Group. Small Group Behavior, 15,1,33-50.

Sillars,A. L. (1980). Attributions and Communication in Roommate Conflicts. Communication Monographs, 17, 180-200.

Thomas, K. (1976). Conflict and Conflict Management. in M. Dunnette (ed.) , Handbook of Industrial and Organizational Psychology. Chicago, IL: Rand McNally Publ, 889-936.

Thomas, K.W. & Pondy, L.R. (1977). Toward an "Intent" Model of Conflict Management among Principle Parties. Human Relations, 30, 12, 1089-1102.

Vroom, VH., & Jago, A.G. (1974). Decision making as a Social Process: Normative and Descriptive Models of Leader Behavior. Decision Sciences, 5, 160-186.